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By:

Application of:

Frei, et al.

Application No.:

10/687,133

Filing Date:

October 15, 2003

Title:

Channel-Selective Blanking for a Medical Device System

Transmitted herewith are the following documents:

X Transmittal Form (1 page) in duplicate

X Information Disclosure Statement, 1 page

X Information Disclosure Statement by Applicant PTO/SB/08a, 4 pages,

with article references attached

X Return Receipt Postcard

Attorney Case No.:

001738.00140

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Signature

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 9	ICANITTAL		Application Number	10/6	587,133
is IRAN	NSMITTAL		Filing Date	Oct	ober 15, 2003
	FORM		First Named Inventor	Mar	k G. Frei
(to be used for all co	rrespondence after initi	al filing)	Art Unit	373	6
			Examiner Name	TBC)
Total Number of Pages	s in This Submission		Attorney Docket Number	011	738.00140
		ENCLO	SURES (check all that apply)		
Fee Transmittal	Form	☐ Drawi	ng(s)		After Allowance Communication to Group
Fee Attache	d	Licens	sing-related Papers		Appeal Communication to Board of Appeals and Interferences
Amendment / Re	eply	Petitio	on		Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
After Final		Petition Applic	on to Convert to a Provisional cation		Proprietary Information
Affidavits/de	claration(s)		r of Attorney, Revocation ge of Correspondence Address		Status Letter
Extension of Tim	ne Request	☐ Termi	nal Disclaimer		Other Enclosure(s) (please identify below):
Express Abando	nment Request	☐ Requi	est for Refund		PTO/SB/08a (4 pages) with copies of article references;
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Response to Mis					
Response to Mis under 37 CFR 1.					
	SIGNA	TURE OF	APPLICANT, ATTORNEY, OI	R AG	ENT
Firm or	Banner & Witco	off, Ltd.			
Individual name	Binal J. Patel,	Registratio	on No. 42,065		
Signature	R	R			
Date	November 23,	2004			
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Date

	IN THE U	NITED STATES PATE (Attorney Docket		ND TRADEMARK OFFICE 11738.00140)
In re U.	S. Patent App	lication of:)	
		Frei et al.)	Examiner: TBD
Applica	tion No.	10/687,133)	A 411 1 0706
Filed:		October 15, 2003)))	Art Unit: 3736
For:	Channel-Sel Medical Dev	ective Blanking For A vice System)	

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Pursuant to 37 C.F.R. Section 1.97-1.98, Applicants wish to make the following references listed on the enclosed Forms PTO/SB/08A and PTO/SB/08B of record in the above-identified application. This Information Disclosure Statement is in compliance with the continuing duty of candor as set forth in 37 C.F.R. Section 1.56.

Applicants believe no fees are due in connection with the filing of this Information Disclosure Statement. However, the Commissioner is hereby authorized to charge any fees that may be due or credit any overpayment of fees to our Deposit Account No. 19-0733.

Respectfully submitted,

BANNER & WITCOFF, LTD.

Dated: Nov. 23, 2004

By:

Binal Patel Reg. No. 42,065

Banner & Witcoff 10 South Wacker Dr. Suite 3000 Chicago, IL 60606 (312) 463-5000 - phone (312) 463-5001 - fax Approved for use through 07/31/2006. OMB 0651-0031

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Coubstitute for form 1449A/PTO Complete if Known Application Number 10/687,133 INFORMATION DISCLOSURE Filing Date October 15, 2003 STATEMENT BY APPLICANT First Named Inventor Mark G. Frei Art Unit 3736 (Use as many sheets as necessary) Examiner Name **TBD** Sheet 1 of 4 Attorney Docket Number 011738.00140

			U.S. PATENT D	OCUMENTS		
Examiner	Cite	Document Number	Issue/Publication Date	Name of Patentee or Applicant of	Pages, Columns, Lines, Where Relevant	
Initials *	No.1	Number - Kind Code ² (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear	
		US- 3522811	08/04/1970	Schwartz et al.		
		US- 3850161	11/26/1974	Saul Liss		
		US- 3863625	02/04/1975	Viglione et al.		
		US- 3967616	07/06/1976	Sidney A. Ross		
		US- 3993046	11/23/1976	Fernandez et al.		
	·	US- 4019518	04/26/1977	Maurer et al.		
_		US- 4038536	07/26/1977	Paul L. Feintuch		
		US- 4295474	10/20/1981	Robert E. Fischell		
	Î	US- 4373527	2/15/1983	Robert E. Fischell		
		US- 4417592	11/29/1983	John E. Roy		
		US- 4566464	01/28/1986	Piconne et al.		
		US- 4581758	04/08/1986	Coker et al.		
		US- 4610259	09/09/1986	Cohen et al.		
		US- 4702254	10/27/1987	Jacob Zabara		
		US- 4944299	07/31/1990	Sergiu Sulvian		
		US- 5311869	05/19/1992	Nappholz et al.		
		US- 5269303	12/14/1993	Wernicke et al.		
		US- 5299569	04/05/1994	Wernicke et al.		
		US- 5311876	05/17/1994	Olsen et al.		
		US- 5335657	08/09/1994	Terry Jr. et al.		
		US- 6473639	10/24/2002	Fischell et al.		
		US- 6480743	11/12/2002	Kirkpatrick et al.		
		US- 6560486	05/06/2003	Osorio et al.		
		US- 6591138	07/08/2003	Ficshell et al.		
		US- 6597954	07/22/03	Pless et al.		
	Ì	US- 6647296	11/11/2003	Fischell et al.		
		US- 2002/0013614	01/31/2002	David L. Thompson		

Examiner Signature	Date Considered	

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Substitute	e for form 1449A/PTC)		Complete if Known			
				Application Number	10/687,133		
INFO	RMATION	DIS	CLOSURE	Filing Date	October 15, 2003		
STA	TEMENT B	ΥΑ	PPLICANT	First Named Inventor	Mark G. Frei		
				Art Unit	3736		
	(Use as many sheets as necessary)			Examiner Name	TBD		
Sheet	2	of	4	Attorney Docket Number	011738.00140		

			U.S. PATENT		····
Examiner Initials *	Cito No.1	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevan Passages or Relevant Figures Appear
		US- 5487754	01/30/1996	Snell et al.	
		US- 5626145	05/06/1997	Clapp et al.	
		US- 5683422	11/04/1997	Mark T. Rise	
		US- 5713922	02/03/1998	Gary William King	
		US- 5713923	02/03/1998	Ward et al.	
		US -5716377	02/10/1998	Rise et al.	
		US- 5720770	02/24/1998	Nappholz et al.	
		US- 5743860	04/28/1998	Hively et al.	
		US- 5752976	05/19/1998	Duffin et al.	
		US- 5792186	08/11/1998	Mark T. Rise	
		US- 5978702	11/02/1999	Ward et al.	
		US- 5995868	11/30/1999	Dorfmeister et al.	
		US- 6016449	01/18/2000	Fischell et al.	
· ·		US- 6018682	01/25/2000	Mark T. Rise	
		US- 6066163	05/23/2000	Michael Sasha John	
		US- 6083248	07/04/2000	David L. Thompson	
		US- 6094598	7/25/2000	Elsberry et al.	
		US- 6117066	09/12/2000	Abrams et al.	
		US- 6128537	10/03/2000	Mark T. Rise	
		US- 6128538	10/03/2000	Fischell et al.	
		US- 6134474	10/17/2000	Fischell et al.	
		US-6200265	03/13/2001	Walsh et al.	
		US- 6224549	05/01/2001	Win Van Drongelen	
		US- 6227203	05/08/2001	Rise et al.	
		US- 6230049	05/08/2001	Fischell et al.	
		US- 6337997	01/08/2002	Mark T. Rise	
	1	US- 6341236	01/22/2002	Osorio et al.	
		US- 6353754	03/05/2002	Fischell et al.	
		US- 6356784	03/12/2002	Lozano et al.	
	1	US- 6360122	03/19/2002	Fischell et al.	
		US- 6366813	04/02/2002	Daniel J. Di Lorenzo	
		US- 6374140	04/16/2002	Mark T. Rise	
		US- 6427086	07/30/2002	Fischell et al.	
		US- 6459936	10/01/2002	Fischell et al.	
		US- 6466822	10/15/2002	Benjamin D. Pless	
	1	US- 6473639	10/24/2002	Fischell et al.	

Examiner Signature	Date Considered	
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	Substitute	o for form 144	9B/PTO				Complete if Known
	INIEO	DAATI	0 N D		LOCUDE	Application Number	10/687,133
					LOSURE	Filing Date	October 15, 2003
	STA	TEMEN	TBY	API	PLICANT	First Named Inventor	Mark G. Frei
						Art Unit	3736
		(Use as ma	ny sheets	as ne	cessary)	Examiner Name	TBD
$\overline{\ }$	Sheet	3	0	f 4	1	Attorney Docket Number	011738.00140

		NON PATENT LITERATURE DOCUMENTS	,
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		Alan V. Oppenheim & Ronald W. Schafer, Digital Signal Processing, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1975, pg. 18-24.	
		Gotman J., & Gloor, P., "Automatic Recognition and Quantification of Linterictal Epileptic Activity in the Human Scalp EEG", Electroencephalography and Clinical Neurophysiology, 1976, 41:513-529.	
		B. Litt and J. Echauz, "Prediction of Epileptic Seizures", 1 The Lancet Neurology 22 May 2002	
		H. Qu & J. Gotman, "A Seizure Warning System For Long-term Epilepsy Monitoring", 45 Neurology 2250, 1995	
		J. Gotman, "Automatic Recognition of Epileptic Seizures in the EEG", 54 Electroencephalography and Clinical Neurophysiology at 530-540, 1982	
		Lapkin et al., "The Electroencephalogram in Childhood Basilar Artery Migraine", 27Neurology 580-583, June 1977)	
		Murro et al., "Computerized Seizure Detection of Complex Partial Seizures", 79 Electroencephalography and Clinical Neurophysiology 330-333 (1991)	
		P. Rajna and C. Lona, "Sensory Stimulation for Inhibition of Epileptic Seizures", 30(2) Epilepsia 168-174, 1989	
		R.P. Lesser et al., "Brief Bursts of Pulse Stimulation Terminate Afterdischarges Caused by Cortical Stimulation", Neurology 53, December 1999	
		Webber, W.R.S. et al., "Automatic EEG Spike Detection: What Should the Computer Imitate", 87 Electroencephalography and Clinical Neurophysiology 330-333 (1993)	
		Grassberger, Peter et al., "Characterization of Strange Attractors" Vol. 50, No.5., The American Physical Society, January 31, 1983.	

ı	Examiner	Date		
	Signature	Considered		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

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	MICO		DIC	OL OCUPE	Application Number	10/687,133	
				CLOSURE	Filing Date	October 15, 2003	-
	STAT	EMENT B	YA	PPLICANT	First Named Inventor	Mark G. Frei	
					Art Unit	3736	
		(Use as many she	eets as	necessary)	Examiner Name	TBD	
$\overline{}$	Sheet	4	of	4	Attorney Docket Number	011738.00140	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2
		lasemidis, L. D. and Sackellares, J. C. "Chaos Theory and Epilepsy". The Neuroscientist, 2:118126, 1996. <retrieved citeseer.ist.psu.edu="" from="" http:="" iasemidis96chaos.html=""></retrieved>	
		Elger, Christian E., et al., "Short Communication: Seizure Prediction By Non- Linear Time Series Analysis of Brain Electrical Activity" European Journal of Neuroscience, Vol. 10, pgs. 786-789 (1998)	
		Gotman, J., "Seizure Recognition and Analysis", Montreal Neurological Institute and Deartment of Neurology and Neurosurgery, McGill University, Montreal, Quebec. H3A 2B4 (Canada)	
		Vachtsevanos, G.J., et al. "Neuro-Fuzzy Approaches to Decision Making: A Comparative Study With An Application to Check Authorization" Journal of Intelligent and Fuzzy Systems, Vol. 6, pgs. 259-278 (1998)	;
		Osorio, Ivan, et al., "Real-Time Automated Detection and Quantitative Analysis of Seizures and Short-Term Prediction of Clinical Onset" Epilepsia, Vol. 39(6) pgs. 615-627, (1998)	
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Examiner	Date	
Signature	Considered	

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